

Listing of Claims:

Claims 1-33 (canceled)

34. (currently amended) A bond pad structure, comprising:

a semiconductor substrate;

comprising interlocking grid structures, formed over said semiconductor substrate;

a passivating layer forms formed over said, interlocking grid structures, having multiple openings to said interlocking grid structures;

a barrier layer formed of tantalum nitride over said passivating layer and in said openings;

a conducting pad formed over said interlocking grid structures and over said barrier layer, whereby an upper surface of said conductive pad provides improved adhesion for subsequently formed bonds.

35. (previously amended) The bond pad structure of Claim 34, wherein said conductive bond pad is formed of copper.

36. (original) The bond pad structure of Claim 34, wherein said passivating layer is selected from the

group consisting of silicon oxide, silicon nitride and polyimide.

37. (previously amended) The bond pad structure of Claim 34, wherein said bond pad forms an interlocking grid array in the bond pad via contact region, which is approximately 100 by 100 microns square and the size of the island structures are from about 10 to 25 microns in width, approximately 4 microns in height, and from about 4 to 10 in number, of interlocking grid structures, increasing surface area for improved adhesion.

38. (previously amended) The bond pad structure of Claim 34, wherein said conductive bond pad is formed of aluminum.

39. (original) The bond pad structure of Claim 34, wherein said barrier layer is formed of tantalum nitride.